



## Department of Energy

Nevada Operations Office

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NOV 30 2000

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ASSESSMENT OF PERFORMANCE FEE EARNED BY BECHTEL NEVADA (BN) FOR  
THE PERIOD APRIL 1, 2000, THROUGH SEPTEMBER 30, 2000, - CONTRACT NO. DE-  
AC08-96NV11718

The DOE Nevada Operations Office (DOE/NV) has completed its assessment of BN's effectiveness in meeting DOE/NV's performance expectations, for the period of April 1, 2000, through September 30, 2000, as reflected in the FY 2000 Performance Evaluation Plan.

Based on this assessment, BN is authorized earned fee in the amount of \$9,505,217 for this period. This is a composite of \$7,079,417 in earnings from the incentive based performance fee pool and \$2,425,800 in earnings from the award fee pool. A copy of the Award Fee Evaluation Report is enclosed for your information.

If you have any questions regarding this matter, please call Melody C. Bell, Director, Contracts Management Division on 702-295-0394.

Kathleen A. Carlson  
Manager

CMD:WBG01072

Enclosure:  
As stated

cc:

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**I EXECUTIVE SUMMARY**

Overall, Bechtel Nevada (BN) provided high quality services in support of DOE Nevada Operations Office (DOE/NV) missions and activities. Exemplary project management and project controls was provided to support DOE/NV and National Laboratory programs. Senior Management has also demonstrated a strong management commitment to establishing a strong safety culture and improving safety practices at the Nevada Test Site (NTS). Further, BN has maintained their commitment to reduce facility deferred maintenance and to dispose of excess facilities as a means to effectively reduce the NTS footprint. BN also led the effort to bring senior DOE/NV and laboratory leadership together to establish a vision for the future of NTS. However, BN needs to increase its leadership in resolution of complex site wide issues. For example, BN needs to fully implement Integrated Safety Management (ISM) and needs to eliminate systemic problems in the areas of work control and electrical safety. BN has also not met DOE/NV's expectation of looking forward for the future of the complex and identifying potential priorities for facility and infrastructure resource planning.

**II GENERAL MANAGEMENT**

BN has continually provided excellent support to DOE/NV through active senior level participation in the accomplishment of key site activities. BN's senior management demonstrated a commitment to effectively partnering with DOE/NV through involvement in essential contract operations. BN led the effort to create a safety committee with management and organized labor as part of its Labor Alliance. BN also played a key role in support of DOE strategic objectives in both the National Security Programs and Environmental Management programs. In addition, BN's excellent project management approach contributed to successful achievements on technical objectives such as the Bright Sun Drill. BN has also provided valuable assistance in preparing for the NTS 50<sup>th</sup> Anniversary.

Although BN has been responsive, it needs to increase strong proactive leadership in alerting DOE/NV to priority issues which need DOE/NV senior management attention. BN needs to be proactive in identifying site-wide issues and defining a path forward to resolve these issues. For example, BN did not aggressively pursue resolution of Bore Hole issues. DOE/NV also took the lead to address the Unexploded Ordnance issue. Additionally, DOE/NV's concern regarding BN's staff to employee ratio and potential management layering have not been fully addressed and BN has not looked forward for the future of the NTS and communicated potential priorities

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for facility and infrastructure resource planning consideration. BN's performance in the area of electrical safety did not meet expectations. A total of eight incidents have occurred over the past three years, including two in this performance period and one in the previous period. These incidents indicate a systemic problem and raise concerns about BN's ability to fully implement ISM.

### **III INTEGRATED SAFETY MANAGEMENT**

#### **Special Emphasis Area 1 - Enhance the Operational Safety Culture at the NTS.**

DOE/NV has placed significant emphasis on ensuring that BN manage and operate the NTS in a safe and efficient manner according to the functions and principles of ISM. BN management has committed to institutionalize ISM throughout the company and has made progress in incorporating safety management principles in policies and procedures. However, additional efforts are necessary to bring about the required change in culture and successfully transition from an expert-based to standards-based system.

#### **Significant Achievements**

BN demonstrated management commitment to establishing a strong safety culture by conducting the second annual ISM Day at the NTS. This event was conducted to promote improved safety practices among NTS workers through positive changes in the safety culture.

BN continued to be responsive in the management of contaminated groundwater in the source vault located in Building A-1. BN developed plans, procedures and other management systems to characterize the site and determine if tritium had migrated outside facility boundaries. In addition to ongoing monitoring efforts, BN recently retained two subject matter experts to review the situation and has already implemented many of their recommendations.

BN received no environmental or Price Anderson Amendment Act Findings of Violation during the performance period although there were several potential violations noted in the Environmental Management area. In addition, BN reviewed all work practices and

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identified potential hazards to ensure worker protection. This resulted in a downward trend in Lost Work Days (0.55 to 0.14) and Total Reportable Cases (2.20 to 2.12) from FY99 rates.

BN's Low-Level Waste Disposal Operations facility continues to demonstrate strong safety records with 278,156 hours worked without a lost time accident. The Waste Control Group has worked without an Occupational Safety and Health Administration recordable or lost time accident since 1992.

In response to a Secretarial initiative, BN completed the Chronic Beryllium Disease Prevention Plan. The plan is of high-quality, is technically accurate and includes current workers who were involved in the milling and lathing of beryllium. The Plan will provide DOE with valuable information relative to future worker compensation claims.

BN successfully closed the Analytical Services Laboratory and transitioned the work to a sub-contractor. This action is expected to greatly reduce sample costs, once all chemicals, radiation sources, records and supplies are removed from the laboratory and the rooms are released to restricted use.

**Areas Requiring Improvements**

Although overall BN safety incident rates continue to decline, BN has not been successful in eliminating electrical near miss incidents. DOE/NV identified electrical safety as an Area Requiring Improvement in the FY 2000 Award Fee Report of BN's Performance for the period of October 1, 1999, through March 31, 2000, after BN experienced one electrical safety incident. Two additional electrical safety incidents occurred during the second half of FY 2000. When coupled with five additional incidents which have occurred since May 1997, DOE is concerned about what appears to be a continuing and significant negative trend. The incidents involve a variety of workers who come into contact with electrical equipment, including electricians, wiremen, linemen and mechanics from both construction and site services organizations working at the Device Assembly Facility, NTS and North Las Vegas complex. Occurrence Reports submitted by BN relative to these incidents indicated that Direct Causes in the majority of the incidents were procedural violations or lack of procedures. These areas were cited as needing improvement during the DOE Integrated Safety

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Management Verification Team Phase I and Phase II reviews. DOE/NV believes BN recognizes the seriousness of the electrical incidents; however, DOE finds any electrical incident unacceptable and challenges BN to focus on eliminating electrical incidents, creating upstream metrics, and aggressively identifying and eliminating the root causes of electrical incidents.

The results of the Integrated Safety Management System (ISMS) evaluation identified other areas requiring improvement: feedback systems, work control process, and training. The report indicated that BN had not fully implemented ISMS in work control activities and that associated company procedures were not integrated.

In May 2000, BN identified a potential violation of the air quality operating permit when two generators were loaned to the Underground Test Area project which had zero operating hours assigned under the permit. BN personnel had the option of loaning generators which were properly permitted, but did not do so. After two similar instances were identified by DOE/NV in the FY 1999 Semi-Annual Award Fee Evaluation, BN advised DOE/NV that appropriate controls had been strengthened. The incident in May indicates that corrective actions to date have not been fully effective.

BN's responsiveness to correcting findings with Risk Assessment Values over 100 did not meet DOE/NV's expectations. For example, after formal notification of the existence of potential unexploded ordnance at the Automatic Weapons Range in Area 6, four months elapsed before BN completed interim corrective actions.

#### **IV SITE OPERATIONS AND INFRASTRUCTURE**

##### **Special Emphasis Area 2 - Enhance Security activities at the NTS.**

DOE/NV defined an expectation requiring the development of an effective tracking system to ensure that security practices meet performance expectations. BN exceeded this expectation and fully satisfied the requirements of the special emphasis area. In the future, involvement of the personnel responsible for day-to-day operations in the self-assessment would greatly enhance the process.

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**Significant Achievements**

BN developed and implemented the required tracking system, which was designed to track findings and observations identified during self-assessments. In addition to addressing DOE/NV requirements, BN was proactive in expanding the process to include all BN security-related incidents. BN now utilizes the system to track the results of self-assessments, security incidents, irregularity reports and loss/theft of property reports. In addition, BN conducts ongoing "real-time" trend analysis which significantly increases the timeliness and effectiveness of corrective actions.

**Special Emphasis Area 3 - Enhance Asset Management.**

DOE/NV has placed significant emphasis on ensuring that BN effectively plans for, acquires, maintains and excesses NTS assets in a manner that meets mission requirements. To this end, DOE/NV developed three expectations designed to place emphasis on maintaining current NTS assets, while developing and implementing an effective footprint reduction process for the NTS. While BN met or exceeded each of DOE/NV's expectations. DOE/NV is concerned about the responsiveness, quality and timeliness of a comprehensive listing of projects and BN's Geographic Information System (GIS) products.

**Significant Achievements**

Maintaining existing facilities and infrastructure is a critical factor in DOE/NV's ability to maintain mission capability and meet customer expectations. For FY 2000, BN committed to continue efforts to reduce the backlog of deferred maintenance and repair work orders. As of fiscal year end, BN had completed 81 of 96 open work orders as verified through a random sampling. This represents an 84 percent completion rate and exceeds the expected completion rate of 80 percent.

DOE/NV places a high priority on the disposition of excess facilities as a means to effectively reduce the NTS footprint. This activity requires the disposal of all non-contaminated real property that has been determined to be excess to DOE mission requirements. For FY 2000, DOE/NV approved a BN Site Services plan to excess 19 facilities. As of September 30, 2000, BN had exceeded expectations by disposing of 24 facilities totaling 57,081 square feet, either through transfer or demolition.

As the footprint reduction process gains momentum, increased generations of excess personal property were expected. Consequently, BN was tasked to focus on improving

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the efficiency of the process for removing personal property from the excess/surplus inventory and shortening removal time frames. To meet this requirement, BN Property Management increased the efficiency of the disposal process by conducting routine excess pickups thus expediting the process and relieving generators of shipping costs. Additionally, reductions in excess disposal cycle time from 270 to 240 days have allowed BN to process increased amounts of excess property.

**Areas Requiring Improvements**

On May 16, 2000, DOE/NV requested the development and monthly submission of a Comprehensive Projects listing. On September 25, 2000, after repeated requests from DOE/NV, BN submitted an incomplete draft listing that did not integrate all projects as requested, did not address Activity Data Sheets identified in the ES&H Management Plan and did not capture the overall project requirements of the enterprise, omitting, for example, the U1a project.

DOE/NV also identified the need for BN to improve cost-estimating practices in the FY 2000 third quarter interim evaluation report. It was noted that unanticipated cost escalations on large projects and failure to consider important details on small projects resulted in reductions or even total elimination of available project contingencies. A recent example of this problem is the NTS alternative fuel station cost estimate. The costs for the station fluctuated and appeared considerably high, especially when compared to commercially designed and installed units. In addition, BN has not met the DOE/NV suspense date for project rescope and validation of the cost estimates.

The FY 2000 semiannual evaluation of BN performance identified problems associated with the development of a GIS. Since that evaluation, BN has taken limited action to rectify the situation by reallocating staff, re-establishing expired software licenses and providing funding to maintain a minimum level of support. DOE/NV encourages BN to continue to look for efficiencies that will reduce costs, including the consolidation of software licenses and computer hardware for GIS. However, in the future, BN needs to clearly communicate its plans to GIS users so that they understand the reasons for consolidation and how services can be obtained.

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**Special Emphasis Area 4 - Support Work For Others Activities associated with the NTS.**

BN continued to support all Work for Others (WFO) projects. While BN met most expectations, concerns remain regarding BN's attention to planning for future resource needs, improving its process for developing Hazards Assessments, and improving customer budget and cost estimates.

**Significant Achievements**

BN provided excellent support to numerous WFO customers. BN's initial work efforts in this area have brought recognition of its technical expertise, which in turn lead to additional work opportunities. Personnel from Remote Sensing Laboratory (RSL) are being brought into projects and forums as recognized technical experts, and as partners that our customers are happy working with. Additionally, the RSL's and Special Technology Laboratory's (STL) knowledge of sensors and systems is garnering BN a wider variety of projects from repeat customers allowing them to branch out into different technologies that have benefitted the emergency response missions. Additionally, STL did an excellent job of providing support to Federal, State, and local crime response entities. Feedback received from these customers indicated that BN's support was useful, professional, and appreciated.

**Areas Requiring Improvement**

BN needs to place additional emphasis on successfully planning WFO to adequately support future program growth. Examples include the delay in the preparation and submission of an Aviation Safety Document concerning a mission to Thule, Greenland. This late submission contributed to DOE/HQ rejecting the overall mission. In another example, after putting forth a concerted effort into growing certain key programs, a large portion of the attracted work had to be turned down due to a lack of space, equipment, and personnel. This impacts DOE/NV's ability to leverage technology improvements and to develop greater personnel depth and expertise.

BN's inability to produce acceptable design and construction plans on time and within the cost estimate caused a classified customer organization to pull a portion of its funding thus reducing the overall scope of the project.



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**Special Emphasis Area 5 - Establish the NTS as an integral part of the national effort for control of, and response to, weapons of mass destruction.**

BN continued to do an excellent job in the support and execution of the U.S. Department of Justice (DOJ) Weapons of Mass Destruction (WMD) project. Project management controls have been effectively put in place by BN project management personnel experienced in project management. The execution of the DOJ/WMD courses has been well coordinated and BN has been active in developing the WMD program, thereby positioning the NTS as a future site of a recurring series of large-scale WMD exercises for the DOJ. BN has also developed an excellent relationship with the Oklahoma City National Memorial Institute for the Prevention of Terrorism under the National Institute of Justice for work on WMD projects and has become involved in technical support for project screening.

**Special Emphasis Area 6 - Strengthen business management systems and processes.**

BN's Business Management Systems and Processes continued to evolve and in some cases, demonstrated exceptional service or strong improvements. Sound financial stewardship of BN's resources was achieved through an effective Financial Management System and systems of internal and accounting controls. A strong commitment to Information Technology and Records Management was evident by the development and implementation of quality business systems and practices, particularly noteworthy was BN's support for the Business Management Information Systems' (BMIS) initiative. Employee Benefits and Training Programs were executed in a cost effective and efficient manner and training was tailored to focus on job and mission related issues. BN's procurement systems continued to show some success in the evolving utilization of alternative procurement approaches.

However, areas exist where improvements are warranted. Overall communications and interactions with customers and program managers have not reached the desired levels. Continued emphasis needs to be placed on improving budget quality cost estimates, on managing indirect variances, and on effectively supporting the Business Management Oversight Program (BMOP).

**Significant Achievements**

BN's month and year-end financial reporting continued to be noteworthy. BN continued to report on time or in advance of the due date and the accuracy of the data is a major reason DOE/NV received minimal edit errors from DOE/HQ. BN transmitted its error free year end data early, enabling DOE/NV to be the first operations office in the Albuquerque Accounting Service Center ready to transmit year-end data to HQ. BN's positive support to the BMIS initiative continued with the timely issuance of a Request

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for Proposal for assistance with Oracle Financials implementation. BN continued to avoid costs with the reuse of deployable software.

BN completed the conference room pilot of the financial system replacement and a DOE specific training course was developed and conducted on the use of the Integrated Business Information Delivery System application. Also, BN proactively implemented process changes to control foreign travel.

BN completed and validated through employee focus groups, an employee survey and a value study of BN employee benefits. The assessments will serve as a basis for improving BN's benefits program and BN's effort are commendable. BN enhanced its community outreach initiatives through the development of a procurement website/homepage and by providing excellent support to the Small Business Exposition. BN actively supported several Enterprise Records Management efforts by partnering with DOE/NV on the Information Document Retrieval and Management System Project and on the integration of a complex wide Defense Programs Records Management Program. An award of excellence was presented to BN for positive contributions to DOE nuclear weapons records management program, specifically the Operation Clean Sweep Project. Also of particular note, BN exceeded all FY 2000 socio-economic goals by the end of the third quarter.

BN's success in implementing a combined local and national Advanced Messaging System was noteworthy and BN's support to the Base Support Trunk Radio System continued to be excellent. Planning and coordination efforts for exchange of the SKYTEL/NTS pagers and activation of the toll-free dial-in number for nationwide calling ensured a seamless transition to the new paging system.

**Areas Requiring Improvements**

The mid-year FY 2000 BN assessment highlighted an observation that interim indirect rates may require more timely adjustment. During the second half of the fiscal year, BN overstated anticipated direct program spending making it difficult for BN to accurately adjust indirect rates. When BN reduced direct spending estimates in August, adequate time was not available to adjust indirect rates requiring the distribution of a significant unfavorable indirect variance at fiscal year end.

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While DOE/NV has noted some improvements in the timeliness of budget cost estimates, the quality of these estimates remains inconsistent. Improvements are also needed in managing indirect variances within the established performance bands and variance disposition procedures. The BMOP monitoring data and draft assessment reports were generally received on time and most expectations were met. However, the quality of some of the reports precluded them from being finalized as joint assessments by the target date.

BN's development of Environmental Management baseline planning continues to need improvement. Statements of work are not fully delineated; schedules have not been developed and integrated into the plan; critical paths have not been established; technology deployment needs have not been integrated; and budget quality cost estimates have not been developed.

**Special Emphasis Area 7 - Demonstrate Progress toward meeting requirements of Executive Order 12958, "Classified National Security Information".**

All expectations associated with this Special Emphasis Area were successfully completed and received award fee consideration during the first half of FY 2000.

**Special Emphasis Area 8 - Support the National Laboratory Program on and off the NTS.**

Partnerships with the National Laboratories at the working level continued to produce excellent results in support of subcritical experiments at the JASPER and BEEF facilities. Project objectives are being met on/within schedule and facilities are either in readiness status or on schedule toward readiness.

**Significant Achievements**

BN continued to provide exemplary project management and project controls support to Lawrence Livermore National Laboratory (LLNL) and the JASPER Team. This support was key to achieving defined programmatic objectives, including the transfer of the JASPER facility within the established time frame. Pre-operational tests were successfully accomplished in accordance with Startup Test Plan objectives. A list of 136 tasks remain to be accomplished, of which LLNL had declared that 38 of those items must be accomplished within FY 2000 in order to maintain the JASPER startup schedule. BN not only accomplished the required 38 tasks but successfully closed an additional 82 tasks by year-end.

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BN successfully supported 29 BEEF experiments, the most experiments conducted in any six month period. These experiments came in under budget, allowing additional experiments to be conducted without going back to the sponsor for additional funding.

Because of BN's diligent support, the Decision Support System modeling of "What-If" simulations for a Under Ground Testing (UGT) now include all 22 Functional Areas (FA) baseline. This effort significantly enhanced the capability to calculate time lines for defined UGT scenarios and increased BN's understanding of the detailed work processes. Static models for the four remaining FAs were successfully completed and effectively used to produce the BN FY 2000 Annual Readiness Assessment.

**Areas Requiring Improvements**

BN's responsiveness to requests for information needs improvement. One specific example is BN's delay in the submission of detailed cost estimating and financial data in a format requested by the Infrastructure Review Team. Another example is BN's non-responsiveness to a request for an interpretation of anomalous dosimeter results from the C-3 facility, which houses the TRI-MEV X-ray Machine. Two anomalous readings recorded on TLDs mounted in the C-3 facility in April 2000 and other recorded readings were higher than expected and could also be considered anomalous as well. BN committed to produce a report by the end of May. To date, the report has not been delivered.

**Special Emphasis Area 9 - Enhance working relationship among DOE/NV, National Laboratories and other NTS users.**

BN continued to demonstrate improved communications between DOE/NV and BN and BN and the national laboratories while participating in periodic partnering meetings to address areas of concerns and communicating ideas for improvements. Because of limited local resources, BN also provided a high level of support to the National Laboratories in their successful efforts to prepare for the ISM verification. This contributed to a better and more cooperative working relationship through the year. BN is encouraged to continue its focus on communication and partnering initiatives.

**Special Emphasis Area 10 - Reduce the cost of doing business at the NTS.**

During FY 2000, BN did not meet DOE/NV expectations for significantly reducing costs at the NTS nor did BN maintain functional support cost ratios at or below the FY 1998 level.

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**Areas Requiring Improvements**

BN developed and DOE/NV approved several opportunities to reduce cost at the NTS. Two areas in which BN made progress in reducing costs in FY 2000 included the elimination of nearly 60 GSA vehicles and the closure of the analytical laboratory. While these savings are noteworthy, BN did not achieve significant cost reductions within the proposed areas during FY 2000. In addition, BN did not maintain functional support cost ratios at or below the FY 1998 level as outlined in this Special Emphasis Area.